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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,004	01/31/2007	Oliver Dernovsek	2005P02376WOUS	6019
46726 7590 01/25/2010 BSH HOME APPLIANCES CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 100 BOSCH BOULEVARD NEW BERN, NC 28562				
EXAMINER LOPEZ, RICARDO E.				
ART UNIT 1794		PAPER NUMBER		
NOTIFICATION DATE 01/25/2010		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

NBN-IntelProp@bshg.com

Office Action Summary

Application No.

10/561,004

Applicant(s)

DERNOVSEK ET AL.

Examiner

RICARDO E. LOPEZ

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 18-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date 12/16/2005

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 18 – 23, 26 – 27, 29 -33 and 34 are rejected under 35 U.S.C. 102(b) as being unpatentable over Mine et al. US Patent No. 4,269,757.

3. Considering claims 18 – 23, 26 and 27, Mine et al. teaches a composition of matter which is a siloxane copolymer, a siloxane polymer, a ceramic forming filler and a peroxide which upon heating to 500.degree. C forms a pliable, flexible ceramic material which is useful as insulation coatings on various electrical conductive substances such as electric wires and cables. Mine et al.'s composition forms an elastomer or a resin-like substance by curing in a normal temperature range and which is subsequently converted to a ceramic substance which is a lightweight ceramic material having excellent dimensional stability, strength, electrical insulating ability and thermal impact properties [Abstract and Col.1, lines, 53-58].

Mine et al.'s composition comprises (A) 100 parts by weight of a siloxane copolymer consisting essentially of $R_{3.3}SiO_{1.5}$ units and $SiO_{2.0}$ units wherein R is a substituted or un-substituted mono valent hydrocarbon radical containing

1-10 carbon atoms which are selected from methyl, ethyl, propyl, vinyl and phenyl groups, or halogen substituted groups or those types. In particular, methyl groups and vinyl groups are the most suitable as R.; (B) 0-600 parts by weight of an organopolysiloxane polymer having the average unit formula $R \cdot \text{SiO} \cdot (4-a) / 2$ and containing no $\text{SiO} \cdot 4/2$ units wherein R has the same meaning as in (A) above and a has an average value of 1-3 ; (C) 3-500 parts by weight of a ceramic-forming filler and, (D) 0.1-10 parts by weight of an organic peroxide [Col. 1, lines 63-68 and Col. 2, lines 1-12].

Component (C) in Mine et al.'s plastic composition includes glass, asbestos, minerals such as kaolinite and montmorillonite, mica, talc, aluminum silicate, magnesium silicate, zinc oxide, magnesium oxide, tungsten carbide, titanium carbide, molybdenum carbide, sodium aluminate, silicon nitride, boron nitride, aluminum nitride, aluminum oxide, zirconium titanate, silicon carbide, potassium titanate, zinc silicate, zirconium silicate, titanium silicate, and composite silicates such as aluminocalcium silicate and aluminolithium silicate.

Furthermore, Mine et al. teaches that these ceramic forming fillers can be obtained from natural sources or from synthetic substances. In all cases, the ceramic forming filler is preferably used in a fine powder form such as is used in conventional ceramic fillers.

Moreover, Mine et al. also teaches that two or more types of ceramic forming fillers can be used in the mixture [Col. 3, lines 15-31 and lines 37-38]. Thus, anticipating all limitations in the instant claims.

4. Considering claims 29 – 32, and 34, Mine et al. teaches in Examples 1-6 the preparation of the plastic composition and its application as insulating material for electrical wire or cable, wherein the plastic composition was coated in a thickness of 0.5 mm on copper wire with a width of 1 mm by extrusion molding and the coating was cured by heating to 400.degree. C. for 3 minutes. The coated electric wires exhibited excellent flexibility. The coated wires were also exposed to the same atmosphere at 850.degree. C. for 30 minutes. No cracks were produced in the coated electric wires, while the coat was converted to a firm and light ceramic material which adhered well to the copper wire [Col. 5, lines 9-14].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 24, 25, 28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mine et al. US Patent No. 4,269,757.

6. Considering dependent claims 24, 25 and 28, Mine et al. is relied upon as set forth above in the 102 rejection of claims 1 and 26. Mine et al. does not specifically

recognize that the halogen fraction in components (A) and or (B) is less than 1 mol %, nor does it recognize that the glass comprises at least one alkali ion fraction, and a phosphate ion fraction of respectively less than 1 mol % , nor does it recognize that at least one of the inorganic starting material and the glass material in component (C) comprises a powder with powder particles having an average powder particle size D50 of a selected one of less than 3 μm and less than 1.5 $\sim\mu\text{m}$.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to select any particular halogen substituted type radical R in components (A) and or (B) in Mine et al.'s composition; and to select for component (C) any particular mol % for phosphate and or alkali ion; along with any particle size D50.

The particular selections would be a result effective variable related to the final application of the plastic composition.

7. Considering dependent claims 33, Mine et al. is relied upon as set forth above in the 102 rejection of claim 29. Mine et al. does not specifically recognize that the substrate (cable or wire) coated with the plastic composition is an electrical component of a household appliance.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the cable or wire taught by Mine et al. in any particular electrical wiring application, including household appliances, with reasonable expectation of successes as this material provides the required properties such as

electrical insulating ability, light weight, strength, flexibility, dimensional stability and thermal impact [Col. 1, lines 55-60].

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICARDO E. LOPEZ whose telephone number is (571)-270-1150. The examiner can normally be reached on Monday to Thursday 8:00 am-5:30pm EST, and every other Friday from 8:00 am to 4:30 pm..

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on (571)-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/REL/
Ricardo E. Lopez
Patent Examiner, Art Unit 1794

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art
Unit 1794

Application/Control Number: 10/561,004
Art Unit: 1794

Page 7